

IN THE CLAIMS

1. (Currently Amended) Preform of a foamable laminate sheet comprising a core between two metal skin plates, said core comprising a foaming agent and a foamable metal, ~~characterised in that wherein~~ the foamable metal comprises at least one foamable metal sheet, and wherein the foaming agent is applied on at least one side of at least one said foamable metal sheet.
2. (Currently Amended) Preform of a foamable laminate sheet according to claim 1, wherein the core comprises a plurality of foamable metal layers, stacked on top of each other, which layers are coated with foaming agent on at least one side of at least one said foamable metal sheet, ~~preferably wherein each foamable metal layer is coated on at least one side of the foamable metal sheet.~~
3. (Currently Amended) Preform of a foamable laminate sheet according to claim 2, wherein the core comprises at least three foamable metal layers, ~~preferably at least four foamable metal layers, more preferably at least five foamable metal layers.~~
4. (Currently Amended) Preform of a foamable laminate sheet according to claim 1, any one of the claims 1 to 3 wherein the foamable metal is an aluminium-silicon alloy.
5. (Currently Amended) Preform of a foamable laminate sheet according to claim 4, wherein the aluminium- silicon alloy sheet is from an AA4000-series aluminium alloy, ~~and preferably having a silicon content in the range of 4 to 14 wt.%, and more preferably in the range of 8 to 13 wt.%.~~
6. (Currently Amended) Preform of a foamable laminate sheet according to claim 4 or 5, wherein the aluminium-silicon alloy sheet further comprises an alloying element as wetting agent and/or for modification of the silicon.

7. (Currently Amended) Preform of a foamable laminate sheet according to claim 1 any one of ~~claims 1 to 6~~, wherein said preform has been compressed prior to a foaming operation at elevated temperature.
8. (Currently Amended) Preform of a foamable laminate sheet according to claim 1 any one of ~~claims 1 to 7~~, wherein the foaming agent is a hydrogenatable metal ~~wherein the metal is~~ selected from the group consisting of Ti, Fe, Co, Al, Cu, Mg, W, Mn, Cr, Be or an alloy thereof.
9. (Currently Amended) Preform of a foamable laminate sheet according to claim 4 any one of ~~claims 4 to 8~~, wherein the foaming agent is in the form of titanium hydride (TiH₂) powder in a quantity of from 0.02 to 8 wt.% of the aluminium-silicon alloy sheet, ~~and preferably in a quantity of 0.05 to 2.5%~~.
10. (Currently Amended) Preform of a foamable laminate sheet according to claim 4 any one of ~~claims 4 to 9~~, wherein at least one metal sheet or foil for lowering the melting point of the aluminium- silicon alloy during any subsequent foaming operation is further interposed between said ~~metal layers~~ skin plates.
11. (Original) Preform of a foamable laminate sheet according to claim 10, wherein the metal sheet or foil for lowering the melting point of the aluminium-silicon alloy is made of copper or copper-alloy.
12. (Currently Amended) Preform of a foamable laminate sheet according to claim 1 any one of ~~the claims 1 to 11~~, wherein one or both of the ~~metal layers~~ skin plates are selected from the group consisting of aluminium, aluminium alloy, carbon steel, stainless steel and titanium.
13. (Currently Amended) Preform of a foamable laminate sheet according to claim 4 any one of ~~the claims 1 to 12~~, wherein one or both of the ~~metal layers~~ skin plates is an aluminium brazing sheet, the aluminium brazing sheet comprising an aluminium core alloy clad on one or

both sides with a brazing alloy, ~~wherein the brazing alloy preferably is an AA4000-series alloy, and wherein at least one layer of the brazing alloy faces the interposed aluminium-silicon alloy sheet.~~

14. (Currently Amended) Foamed laminate sheet structure comprising two metal skin plates having a foamed aluminium-silicon alloy core structure, which foam structure has been produced with the aid of a preform according to ~~claim 1 any one of claims 1 to 13~~.

15. (Currently Amended) Method for manufacturing a preform of a foamable laminate sheet according to ~~claim 1 any one of claims 1 to 13~~, comprising the steps of:

(a) providing at least one foamable metal sheet coated on at least one side with a coating comprising a foaming agent;

(b) assembling said at least one coated foamable metal sheet between two metal layers into an assembly;

(c) applying a controlled load on top of said assembly for improving the bonding between the coating and the foamable metal sheet and to form a preform, ~~wherein preferably the controlled load is applied in a rolling operation.~~

16. (Currently Amended) Method according to claim 15, wherein the foamable metal sheet is an aluminium-silicon alloy.

17. (Currently Amended) Method according to claim 15 ~~or 16~~, wherein the controlled load is applied in a hot rolling operation at a temperature not exceeding 400°C, ~~and preferably the preform is reduced in thickness by at least 25% during the load applying operation.~~

18. (Currently Amended) Method according to ~~claim 15 any one of claims 15 to 17~~, wherein during assembling of the assembly also at least one metal sheet or foil is interposed

between the two metal skin plates for lowering the melting point of the foamable metal during any subsequent foaming operation.

19. (Currently Amended) Method according to claim 15 ~~any one of claims 15 to 18~~, wherein during step (c) the resulting preform is provided in the form of a coiled preform.

20. (New) Preform of a foamable laminate sheet according to claim 1, wherein the core comprises a plurality of foamable metal layers, stacked on top of each other, wherein each foamable metal layer is coated with foaming agent on at least one side of the foamable metal sheet.

21. (New) Preform of a foamable laminate sheet according to claim 2 wherein the core comprises at least four foamable metal layers.

22. (New) Preform of a foamable laminate sheet according to claim 2 wherein the core comprises at least five foamable metal layers.

23. (New) Preform of a foamable laminate sheet according to claim 4, wherein the aluminium- silicon alloy sheet is from an AA4000-series aluminium alloy having a silicon content in the range of 4 to 14 wt.%.

24. (New) Preform of a foamable laminate sheet according to claim 4, wherein the aluminium- silicon alloy sheet is from an AA4000-series aluminium alloy, having a silicon content in the range of 8 to 13 wt.%.

25. (New) Preform of a foamable laminate sheet according to claim 4, wherein the foaming agent is in the form of titanium hydride (TiH₂) powder in a quantity of from 0.05 to 2.5 wt.% of the aluminium-silicon alloy sheet.

26. (New) Preform of a foamable laminate sheet according to claim 1, wherein one or both of the metal layers is an aluminium brazing sheet, the aluminium brazing sheet comprising an

aluminium core alloy clad on one or both sides with an AA4000-series brazing alloy, and
wherein at least one layer of the brazing alloy faces the interposed aluminium-silicon alloy sheet.

27. (New) Method according to claim 15, wherein the controlled load is applied in a rolling operation.

28. (New) Method according to claim 15, wherein the controlled load is applied in a hot rolling operation at a temperature not exceeding 400°C, and the preform is reduced in thickness by at least 25% during the load applying operation.